UTKU ARSLAN

DATA SCIENTIST

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Passionate about applying data science to sustainability and climate action. Currently pursuing an MS in Computer Science (ML) at Georgia Tech. End-to-end experience building ML pipelines, forecasting systems, and analytics at J&J, biotech, and consulting — with a track record of ownership, cross-functional collaboration, and measurable outcomes. Seeking to apply this foundation to environmental data systems and sustainability reporting at scale.

TECHNICAL SKILLS

- **Statistics & OR:** Descriptive statistics, hypothesis testing, linear programming, simulation, experiment design, optimization, statsmodels
- **ML & Modeling:** scikit-learn, LightGBM, XGBoost, AutoGluon, PyTorch, Optuna, K-means, logistic regression, decision trees, XAI, time-series forecasting, recommender systems
- **Data & Visualization:** pandas, NumPy, EDA, seaborn, Plotly, D3.js, reporting, metrics & measurement
- **Deployment:** Python, REST APIs, Docker, Git, CI/CD, Linux/WSL2
- **Remote Sensing:** Sentinel-2, Copernicus API, GIS, satellite imagery analysis, spectral data processing
- **Languages:** Turkish (Native) · English (Bilingual) · German (Intermediate) · Dutch (Intermediate)

EXPERIENCE

Data Scientist / ML Engineer — Eurosis Consulting — Sep 2024 – Present

- Developed predictive ML + LLM systems (YOLO, Siamese-net, DeepOCR, Langchain) integrated into consulting workflows; full end-to-end ownership.
- Deployed models across engagements with measurable lift in survey analysis; built LLM automations halving manual deliverable preparation.
- Collaborated with consultants and clients on stakeholder-ready outputs: reporting, decision framing, and rollout support.

AI Developer — Poiesy Biotech — Sep 2023 – Apr 2024

- Engineered genomic + clinical prediction pipeline for bone marrow transplant outcomes; reached ~83% BCE accuracy validated against clinical baselines.
- Owned full pipeline (data processing → feature engineering → modeling → evaluation); supported product decisions with uncertainty and trade-off analysis.

Machine Learning Developer — Johnson & Johnson — Aug 2022 – Aug 2023

- Designed production forecasting models for immune-cell growth in GMP context; achieved ~92% sMAPE on 60-day horizons (vs ~75% baseline).
- Partnered with scientists and leadership on latent-variable biomarker inference; automated production reporting.

IT Project Consultant — United Nations University (MERIT) — Sep 2021 – Feb 2022

- Architected AI-driven climate risk models integrated with GIS and remote sensing data for a community resilience platform — projected 10–15% relief cost savings.
- Evaluated technical stacks and vendors; produced implementation roadmap and sustainability reporting framework balancing feasibility, cost, and impact.

SELECTED PROJECTS

- **Oceanic Garbage Island Detection —** built Hydro CNN (water-body segmentation CNN) on satellite imagery to detect oceanic plastic in the Southeast Asian Pacific; Berlin-based startup collaboration.
- **Open Ocean Wave Energy Analysis —** modeled open ocean wave energy distributions on Sentinel-2 data via Copernicus API; fit power-law models and long-memory analysis (Hurst exponents) to characterize wave propagation patterns.

EDUCATION

MS, Computer Science (Machine Learning) — Georgia Institute of Technology *(In Progress)*

BS, Data Science & Artificial Intelligence — Maastricht University

CERTIFICATIONS

ML Specialization (Stanford) · **Advanced Data Analytics** (Google) · **Probabilistic Deep Learning** (Imperial College London) · **Remote Sensing** (KIT) · **Our Earth: Climate, History & Processes** (U. Manchester)